

"Curie Point" Demonstration Device: New Magnetic Generator

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The electromagnetic theory states that magnetic field exerts strong magnetic forces on ferromagnetic materials and weak forces on non-magnetic materials. Based on this theory, combining the "Curie point" features of ferromagnetic materials, a magnetic-torque-driving rotating device is developed. 8 ~ 16 NiFeGa small circular pieces are placed on the edge of homogeneous acrylic disk which is placed vertically and rotate through a central axis. A strong magnet is placed near the edge at a distance of about 1cm. An electric heater is placed near the small circular piece which is most close to the magnet. As being heated by the heater, the piece's temperature is higher than the "Curie point" and the piece transforms into non-ferromagnetism. With the vanishing of interaction between strong magnet and this piece, the edge of the disk is in unbalanced stress. As a result, there is a rotating torque, which drives the disk to rotate. With the rotating of disk, the next small circular piece experiences the same process. In this way, a constant rotating torque comes into being, under the effect of which, the disk rotates constantly. On this basis, by means of simple mechanical transmission devices, magnetic force rotating sliding board is manufactured.

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